

Section 4:

Estimating the Local Cost of Preschool for All

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Introduction

The goal of this section is to offer a practical method to estimate the cost of implementing Preschool for All at the local level, such as in a county, city, or school district. It is important to stress that this approach is designed to capture the potential range of preschool costs; it does not constitute a recommendation for a state reimbursement. Put another way, the local cost of a preschool program space, or slot, is not necessarily the same as the cost the state will incur. In practice, the cost of making quality preschool accessible to all is likely to vary considerably in different parts of the state, as well as depending upon the service deliverer. Thus, even if California already mandated the provision of universal access to preschool and provided a standard per-child reimbursement equivalent to that for kindergarten, it would still be important for communities to estimate the cost of implementing the service locally. This section will describe one potential strategy for determining the cost of Preschool for All and will include a possible phase-in scenario; Section 5 will explore potential financing mechanisms.

Basic Approach

This section begins with a brief description of potential policy parameters for Preschool for All in California, which we will use as working assumptions for the model. We then provide an overview of our proposed method and the model's components. Next, we describe how planners could adapt the model to the county level in California, suggesting data sources where appropriate. Finally, we offer an example of how the model can be used to estimate the cost of Preschool for All in a California county with a population that is culturally and linguistically diverse.

Program Elements for First 5 Preschool for All

The proposed program elements set forth in the First 5 Preschool for All Demonstration Project criteria mirror the recommendations in the Superintendent's Universal Preschool Task Force Report in 1998 and in the School Readiness Workgroup Recommendations of the State Master Plan for Education in 2002. The program elements are as follows:

- Preschool should be free to all four-year-olds (and, eventually, to all three- and four-year-olds), voluntary, and offered for at least one-half day during the regular school year (e.g., 3.5 hours for 175 days or a full year equivalent of 2.5 hours for 245 days).
- Every classroom should have a master teacher with a Bachelor's degree in early childhood education or child development, or with a bachelor's degree in another subject and 12 units of early childhood education or child development, within five years, and an Early Education credential within 10 years.
- Staff-to-child ratios should adhere, at a minimum, to professional standards of the National Association for the Education of Young Children. For preschool-age children,

this means a minimum of one staff person for every 10 children, with a maximum group size of 20. California's State Preschool Program and Title 5 General Child Care and Development Program currently require a 1:8 staff-child ratio and a maximum class size of 24, and these standards would continue to apply to classrooms that do not have a teacher with a Bachelor's degree. Only classrooms with a lead teacher with a Bachelor's degree in an appropriate field should have the option to move toward the research-based alternative of 1:10.

- Preschool should be provided in appropriate facilities that are clean, safe, accessible, inclusive, licensed, and equipped with sufficient, developmentally appropriate materials.
- Preschool services should include children with disabilities and other special needs (at least 17-23% will have a special need, and/or 10% will have disability as certified by an Individual Education Plan).
- Preschool will take place in a variety of public and private settings that meet the new Preschool-for-All standards. These settings may include existing State Preschool and General Child Care programs located on or off school sites, Head Start, other licensed child care centers, and networks of family child care homes.
- Preschool will be a viable option for all families by providing connections to full-day, full-year services when needed, either by embedding the preschool program in a full-day program or by providing linkages to other early care and education providers for wraparound services.

Overview of the Model

The basic approach we propose for estimating costs involves adapting a model originally developed by the Institute for Women's Policy Research (IWPR) and Early Childhood Policy Research (ECPR) for states to estimate the cost of implementing universal preschool. Much of the methodology used in the IWPR/ECPR model can be applied to the development of local cost estimates. It is designed so that users may rely upon available data sources, thereby not requiring extensive new research. The model assumes that the majority of costs related to program implementation will be upgrading early education teachers, both in terms of professional development and compensation. In addition, the model assumes that investments will not only be made at the program level, but also at the systemic level, helping local jurisdictions support preschool programs with funds for professional development, quality assurance, and supply maintenance. However, because the model was originally designed to estimate costs at the state-level, some data sources originally suggested by designers do not include information specific to the county, city, or school district level. To use this model at the local level, therefore, requires some additional research. And as with other jurisdictions that have used this approach, some model modifications have been made.

The IWPR/ECPR model is composed of two categories, **direct service costs** and **infrastructure (or indirect) costs**. The direct service costs, as outlined in *The Price of School Readiness: Estimating the Cost of Universal Preschool in the States: A Tool for Researchers, Advocates*

and Policymakers (Golin & Mitchell, forthcoming), include an estimated per-child-hour unit cost to a specific early care and education program to provide children preschool at a standard set forth by early childhood experts. In the case of the First 5 plan, this would mean the cost of compensating teachers appropriately for meeting Preschool for All standards as outlined above. The per-child-hour cost also includes non-personnel costs such as occupancy, administration, insurance, classroom materials and furniture, and other costs associated with direct service. Infrastructure costs, as outlined in the above document (Golin & Mitchell, forthcoming), include adequate funds for:

- Professional development to ensure the availability of qualified teachers;
- Technical assistance and consultation to preschool providers and teachers;
- Monitoring for program quality assurance (such as additional inspectors);
- Evaluation and child assessment (which in California includes ensuring the full implementation of the Desired Results System, including both developmental profiles of children and third-party evaluation to monitor program quality through the Early Childhood Environmental Rating Scale (ECERS) and Family Day Care Rating Scale (FDCRS);
- Facilities renovation and/or construction (with an emphasis of ensuring that construction take place in areas with the greatest need); and
- Administration or governance.

Recognizing that investments in infrastructure will be essential to the successful implementation of Preschool for All, and that these components will require statewide direction and support, First 5 California will reserve 10 percent of its \$100 million for Preschool for All Demonstration Grants to address these infrastructure needs. However, these infrastructure components will be addressed only briefly here. As part of a statewide cost estimate project being conducted with assistance from the David and Lucile Packard Foundation, work is underway to estimate the infrastructure costs as they relate to workforce development, and references to this methodology will be shared in future additions to the Toolkit. The primary focus of this section, therefore, is on the direct service costs likely to be encountered by preschool implementers locally. The next section describes the steps necessary to conduct the cost estimate and demonstrate how this method can be applied to a sample county.

A Guide for Using the Proposed Cost Estimate Strategy at the County Level

The following steps take users through the proposed strategy for estimating the cost of preschool at the California county level. Because the IWPR/ECPR model is designed to be flexible to allow changing program parameters, users have the option of making a number of different decisions regarding the information they enter into the model. The steps below represent how we propose program planners and other stakeholders could use this approach, however we will note when

users have options to incorporate alternative data sources or decisions about various model inputs.

Stage 1: Assemble a Workgroup

We suggest that the first step is to assemble a workgroup to advise the cost estimate process. The workgroup should meet periodically to help provide information that is not easily available through existing data sources and to review estimates as the process unfolds. This workgroup should include core members from the following organizations or agencies:

- County Office of Education,
- School District(s),
- Child Care and Development Planning Council (LPC),
- Child Care Resource and Referral, and
- First 5 School Readiness Program.

In addition, the workgroup should seek input, including existing budgets, from the coordinators or directors of existing early care and education programs who would most likely offer Preschool for All. These include:

- State Preschool,
- Head Start,
- General Child Care and Development Program (Title 5),
- Licensed center care (Title 22), perhaps accessed through local affiliate of California Association for the Education of Young Children,
- Family Child Care Network (Title 5) and licensed family child care, as accessed through local Family Child Care Association.

Stage 2: Determine the target population and estimate the number of children most likely to be served in the new program, as well as how much service those children will need.

The next step is to determine which children will be served in the local Preschool for All program, how many of those designated will most likely enroll, and whether those children will participate in Preschool for All in a full-year or school-year program. The Universal Preschool Task Force Report, the California Master Plan for Education, and the First 5 Preschool for All Demonstration Grant criteria all envision that preschool will eventually be accessible to all three-

and four-year-olds in California. Nevertheless, recognizing the current budget crisis, the phase-in of Preschool for All is most likely to begin with priority for four-year-olds. Therefore, while the cost estimate model could easily be adjusted to include three-year-olds, for purposes of this exercise, we will assume that the program will be limited to four-year-olds.

Stage 2. Step 1. Estimate the number of children who will most likely enroll in preschool

While we suggest that users assume all four-year-olds will be eligible for Preschool for All, we do not think that all four-year-olds will participate. We, therefore, recommend that users estimate the number of participating children. Estimating participation is actually a two-step process. To determine the number of children who will most likely enroll in the program, users should first estimate the total size of the target population, which in this case is all four-year olds in a given county. To determine the total number of four-year-olds in a county or city, we suggest that users consult the 2000 Census. Decennial data include single age counts of residence in local areas such as counties, cities, and at the block level. In some cases, users will want to determine program costs at the school-district level. In this case, users can either rely on block-level decennial data or school district data. To determine the total number of four-year-olds in a school district, we suggest users look up the California Department of Education website, find the number of children in kindergarten in each school in the district, and assume that there are approximately the same number of four-year-olds. The actual number of four-year-olds will of course be different than the number of kindergartners, but if users do not have access to block-level Census data, we think this is a good proxy.

Once general population estimates are made, users should then determine a participation rate. If preschool were free and available to all four-year-olds in California, “the participation rate would most likely be high, but not 100 percent” (Golin and Mitchell, forthcoming, p. 26). “Not all parents will want their children to be in preschool” (Golin and Mitchell, forthcoming, p. 26). Thus, it is important to make the distinction between population size and participation.

Users have a number of options for estimating likely participation rates. One method, according to Golin and Mitchell (forthcoming), is to consult nationally collected data. For example, the U.S. Department of Education Statistics reported that in 2000, 65 percent of four-year-olds were in a “preprimary” program, such as nursery school or pre-kindergarten (2001). While these data are indeed useful, they do not directly address the type of universally accessible program proposed for California.

Another option, suggested by Golin and Mitchell and others, is to examine participation in comparable preschool programs across the country as a way to estimate participation in Preschool for All. For this exercise, we recommend using the participation rate from Georgia, the only state that has so far made preschool free and available to all four-year-olds. In the Georgia Universal Pre-K program, 70 percent of all four-year-olds are in the state Pre-K program or in Head Start (Schumacher, Greenberg, and Lombardi, 2001). We, therefore, suggest that local cost estimates assume a minimum participation rate of 70 percent for four-year-olds. However, in California, some counties already have a high participation rate of children in structured early learning programs, and in those cases, participation may be higher. It is also likely that, if preschool were free and combined with a school readiness initiative to conduct outreach to

encourage enrollment, the participation rate would be even higher in neighborhoods surrounding low-performing schools.

By this step in the process, users should have determined how many four-year-olds are in their locality and how many would participate. For example, if a county has 5,000 four-year-olds, a 70 percent participation rate would mean that 3,500 four-year-olds would most likely enroll in Preschool for All. In a later section, we will address how to incorporate those children into the program when we address our suggestions for Preschool for All implementation.

Stage 2. Step 2. Estimate the number of children that will most likely be served by various service durations

The next step is to estimate how many children will most likely receive preschool in a part-day, part-year arrangement and which will likely receive preschool in a full-day, full-year arrangement. Preschool for All will most likely be available in a number of early education settings. Therefore, model users will most likely need to estimate the percentage of children who will receive services in each type of setting, as this could affect the costs of implementing the program locally, even if the state reimbursement is the same statewide.

The First 5 California Preschool Demonstration Grants will provide funding for a total of 612.5 hours per year. In the case of preschool in a school-year program, service duration would equal 3.5 hours per day, 175 days per year. In the case of a full-year arrangement, service duration would be 2.5 hours per day for 245 days. Given current budget deficits in California, public funds for preschool will most likely be limited to these part-day scenarios. Nevertheless, First 5 recognizes that many families will need access to extended day, extended year services either as a part of the same preschool program or in the form of wrap-around services that are convenient to the preschool setting.

There are several options for estimating the number of children whose families would choose school-year preschool programs, or full-day, full-year early care and education programs that include a Preschool for All component:

- One option is to conduct a thorough survey of families regarding their preferences, as is planned in San Mateo County and described in Section 3. When this survey methodology is available, it will be included in this Toolkit. We recommend the survey approach as the best way to estimate usage. However, many counties may not have the funds or resources to conduct such a survey.
- Another option, according to Golin and Mitchell (forthcoming), is to review current early care and education participation data and to assume that the current patterns of usage of full-year and school-year settings for four-year-olds will continue as the total enrollment in preschool increases. For example, Head Start Program Information Reports contain data on the number of children in Head Start programs, child care resource and referral agencies tracks the early care and education supply (though not actual enrollment) by age group, and the California Department of Education and local educational agencies have enrollment data on children in State Preschool and General Child Care and Development programs. If one county, for example, has 30 percent of four-year olds in part-day Head



Start, 20 percent in part-day State Preschool, and 50 percent in full-day child care centers or family child care, model users could assume that 50 percent of four-year-olds would be in part-day, part-year programs and 50 percent would be in full-year programs. One drawback to this method, according to Golin and Mitchell (forthcoming), is that these types of data do not account for children who are in more than one arrangement, such as a part-day preschool during the morning, a family child care home in the afternoon, and parks and recreation program in the summer. Furthermore, in cases where families use multiple arrangements, it is not clear whether they do so because they prefer this package of arrangements or simply because that is the only choice available.

- Another option Golin and Mitchell suggest is to use parents' employment patterns to estimate program duration categories. If all parents present work or go to school, one could assume that children need preschool full-day, full-year services. If at least one parent in the household is not working or going to school, then one may assume that part-day, part-year services would suffice. Finally, if parents work part-time or irregular shifts, they may prefer a part-day, full-year program. Unfortunately, while we think this would be the best method to estimate the demand for part- and full-day arrangements, it is quite difficult to find this level of detail about parent employment patterns at the local level. One possible potential source of data could be Census micro data that will be made available later this year.

Given the limitations of data at the local level, we suggest that model users use a combination of county-level information from the Census regarding the percentage of children birth to 5 with working parents (See www.census.gov, Summary File 3, Table P46) and current participation data as collected by local child care resources and referral agencies, school districts, and Head Start agencies. Users would then assume that, at least during program implementation, the proportion of children in full-year and school-year arrangements would remain the same. However, we recognize that as Preschool for All becomes more widely available participation patterns could shift.

Stage 3: Estimate the cost to local program to provide Preschool for All

Once users have determined the number of children participating in the program and where they will most likely be served, the next step is to determine direct program costs. As we mentioned above, our approach assumes that direct costs to programs to provide Preschool for All would include the additional cost of procuring and compensating teachers with qualifications comparable to those of kindergarten teachers in public schools, procuring and compensating directors with qualifications comparable to those found in public schools (e.g., principals), and providing adequate funding for non-personnel items including occupancy, classroom materials, insurance, and utilities.

Our approach assumes that Preschool for All will be built upon the existing supply of early care and education programs, including the State Preschool Program, the General Child Care and Development Program, Head Start, other licensed center care, and family child care home



networks – assuming these programs are interested in and willing to meet the Preschool for All standards. Therefore, the model assumes that program slots in some existing ECE settings will be “upgraded” to provide services at the levels described above to children already in the early care and education system, as well as to serve new children when spaces already exist in qualified programs. At the same time, in neighborhoods where there is little appropriate preschool or other structured early education, new slots adhering to Preschool for All standards will be created.

Stage 3. Step 1. Develop Budgets to Estimate Direct Costs

We suggest that users estimate direct costs based on developing “proxy budgets” to account for current costs of providing service in various early educational settings and gauging how those costs would change in order for programs to provide the standard of preschool service described above. Because most localities will not have the means to implement a full “cost of quality” early education study, we recommend this approach, which allows users to incorporate available data on various programs in a way that “captures” realistic estimates of current program costs and potential preschool costs.

Our strategy requires that users develop two separate budgets across a variety of programs. We suggest for purposes of estimating costs that users select major programs that are most likely to provide preschool within their local setting. For example, these might include State Preschool, Head Start, Child Care and Development programs meeting Title 5 standards, family child care homes that are part of networks that meet Title 5 standards, and licensed child care meeting Title 22 regulations. If these are all viable options within the local setting, two budgets would be designed for each of these programs, totaling 10 different budgets. It is important to note, however, that selecting these programs does not suggest that Preschool for All could not be served in other types of programs, such as nursery schools. This is simply an exercise to capture the most prevalent range of costs.

The first set of budgets for each program should try to capture the current program expenditures based on current standards. To construct the “current” or “before” budget, users should build upon generally recognized staffing patterns and compensation (including benefits coverage). In addition, budgets should include non-personnel items such as occupancy and administration. The following are some suggestions for contacting agencies that can help users gain access to vital information.

- To develop a “Before Preschool for All” budget for a State Preschool Program, contact the County Office of Education preschool coordinator and the preschool administrative director for the school districts for which cost estimates are to be developed. Ask them to provide actual budgets for State Preschool programs, including personnel and non-personnel, and with information about the staffing patterns, hours and days of service, staff compensation, and number of children served. Also ask them to provide information on in-kind contributions, such as reduced cost of occupancy or maintenance. Ask the same sources for information about General Child Care and Development Programs. Because both State Preschool and General Child Care are contracted

programs that must meet Title 5 standards, the administrators overseeing State Preschool usually can provide assistance in locating budget information on General Child Care programs as well.

- To develop a “Before” budget for Head Start, use the Head Start Program Information Reports for the program(s) in the county, city or school district for which the cost estimate is being developed. These are available from the Department of Health and Human Services, Administration for Children and Families, Head Start Bureau. For purposes of determining the cost, include only the education component of Head Start. That is, include all of the personnel involved with delivering education services, such as the program director, education coordinator/manager, and teaching staff. But do not include that portion of the budget spent on health or other comprehensive services, such as the health services coordinator/manager and the family services/community partnership coordinator/manager. Again, also ask about the in-kind contributions the program receives that might not be available to all programs if Preschool for all were implemented on a large scale.
- To develop a “Before” budget for a child care program meeting Title 22 standards, there are several possible sources of information. Ask the members of the Workgroup to help collect sample budgets from licensed early care and education programs serving preschool age children. Also, consult early care and education staffing studies to look for the average or median salary for various positions. The Center of the Study of the Child Care Workforce has conducted studies on the qualifications and compensation of the workforce in eight California counties. These reports are available on the California Child Care Resource and Referral Network website: www.rnnetwork.org. Or Contact Marcy Whitebook at mwhbk@uclink.berkeley.edu for more information.

To develop “Preschool for All” or “after” budgets, users should assume that the primary cost difference will be in areas of compensation for personnel meeting new Preschool for All standards (e.g., a Bachelor’s degree for teachers). In some cases, labor costs will not only rise because of increased salaries but also because of required staffing changes. For example, Title 22 child care centers are currently required to have a 1:12 adult to child ratio. Under Preschool for All, the ratio will have to be lowered to 1:10 (or 1:8, as described below). These programs, therefore, will have to hire new staff to cover the lower ratio. To gather information to design “preschool” or “after” budgets, we recommend the following:

- To find out the median or, if that is not available, average kindergarten teacher salary, contact the school district(s) in the area.
- As indicated in the Preschool for All Principles above, staff-child ratios must meet one of two patterns – either the current Title 5 requirement for a 1:8 adult-child ratio with a maximum class size of 24, or a research-based alternative, which is a 1:10 ratio with a maximum class size of 20 after the teachers have bachelor’s degrees and meet other Preschool for All criteria. In this section, we have based the sample cost estimate on the latter approach because it is more consistent with national accreditation criteria, the State Master Plan for School Readiness Work Group recommendations, and California’s policy



on class size reduction. However, programs would certainly be encouraged to exceed the ratio by recruiting parents and other volunteers. In addition, our estimate also includes an additional staff member of “floater” to be shared across three preschool classrooms. Another cost component for consideration is staff time for professional development days.

In addition, when developing budgets it is important to try to ensure that all salary data used in the budgets is standardized by year. If this is not the case, users may have to use a Consumer Price Index to standardize the years of data.

Although the increased labor costs will most likely represent the largest increase in the cost of service, we also recommend adjusting the non-personnel costs to take into account in-kind contributions such as donated space or reduced occupancy costs, because these items may not carry over in the case of large scale implementation.

Stage 3. Step 2. Calculate the Per-Child-Hour Unit Cost

The next step is to calculate the per-child-hour cost. There are two strategies to do this: one for estimating the cost of upgrading existing early childhood spaces, and a second for estimating the cost of creating a new space. To estimate the cost of creating a new space, we recommend using the “after” or “Preschool for All” cost of the State Preschool program. This is because once existing spaces are upgraded to meet the new preschool requirements, the cost of providing preschool in all programs should be standardized. To calculate this cost, we suggest the following strategy:

For a “new” space:

- a. Refer to the State Preschool program budgets and calculate an annual per child cost for the “after” budget.
- b. Divide the annual per-child cost by the number of hours of State Preschool program operation for the year. This should be the number of hours the program serves children per year.
- c. This per-child-hour unit based on the “after” budget could be used as the cost of a new slot.

For estimating the cost of upgrading existing early childhood spaces in full-day programs to meet new Preschool for All standards, there are two options:

Option 1:

IWPR/ ECPR recommends that for full-day, full-year programs, the per-child-hour direct program cost should reflect the current cost of providing service in an existing early care and education program for the annual number of Preschool for All hours (in this case 612.5 hours) PLUS the cost of upgrading the whole program to enable providers to deliver Preschool for All-level quality. The logic is this: Although Preschool for All will only be provided for 612.5 hours,

program providers, particularly those in full-day, full-year programs, would be unable to improve their programs for only part of the day. Thus, the cost estimate must incorporate the full duration of the program. If this option is selected, users should then be able to calculate this rate in the following way for each early childhood arrangement included in the estimate.

For an “upgraded” preschool space in a full-day program:

- a. Calculate the per child annual cost for each “before” and “after” budget.
- b. Subtract the “before” budgets from their “after” or Preschool for All counterparts. This should provide a cost differential for each program.
- c. Transform the difference into a per-child-hour cost by dividing it by 612.5, the total number of Preschool for All hours per year.
- d. Then, take the “before” annual per child cost and divide that number by the total number of hours the program currently operates per year. This represents the per-child-hour cost of the current program.
- e. Add the per-child-hour cost for upgrading the slot to the current per-child-hour cost. This represents the full cost of paying for one existing slot of Preschool for All in an existing full-day early education program.

Option 2:

Another approach is to assume that the new Preschool for All per-hour cost will only include the cost of upgrading the preschool portion of the day, and to assume (1) either that the additional costs associated with a full-day program will be borne by other funding sources, or (2) that the program will be configured so that lesser trained, less expensive staff are employed to cover the additional hours, with the Bachelor degree staff assigned to more than one group of children during the day.

It is important to note that the cost of upgrading the State Preschool Program and General Child Care and Development (Title 5) to meet new Preschool for All Standards also must take into account that the current state reimbursement in many areas of the state does not cover the cost of the program even at the current standards. In our sample county below, the State Preschool reimbursement covered approximately $\frac{3}{4}$ of the cost of the program at current standards, and the General Child Care and Development Program reimbursement covered only about $\frac{2}{3}$ of the cost of the program. Providers pay for the difference only by receiving in-kind contributions, such as reduced price or free space to operate the program.

See Appendices 4-1 through 4-3 for an example of a cost estimate of upgrading a current State Preschool Program, a General Child Care and Development Program, and a Head Start Program to meet the proposed Preschool for All standards in a sample California County. For purposes of this exercise, the per-child cost of upgrading centers meeting Title 22 licensing requirements, or for family child care homes, was assumed to be the same as the per-child cost of upgrading a center meeting Title 5 standards. Currently, the Title 22 standards are less stringent than Title 5

standards. Nevertheless, our research indicates that the market rate for preschool child care meeting these lesser standards appears to be higher than the existing state reimbursement for programs required to meet Title 5 standards.

Stage 3. Step 3. Assigning Unit Costs to children

Once users calculate the full cost of upgrading a slot in an existing early education program and the cost of a new slot, the next step is to assign these costs to the estimated number of participating children. In general, and given the limitation of data at the local level, we recommend assigning children based on current usage patterns. For example, if 30 percent of four-year-olds in a given county are in a Head Start program, 30 percent should be assigned the per-child-hour cost of receiving preschool in a Head Start setting. Although usage patterns may change once the Preschool for All program is fully implemented in a community, we recommend this approach as the most straightforward way to begin.

The next step is to determine whether children will be able to be placed in an existing slot or a new slot. The strategy that we recommend for determining this is to base estimates on current data collected by Child Care Resource and Referral agencies. As noted in Section 3, these agencies collect data or have data on the number of early care and education “slots”, including State Preschool, Head Start, private centers, and family child care, not the actual number of children enrolled.

To obtain this data, we suggest that users first consult the most recent California Child Care Portfolio produced by the California Child Care Resource and Referral Network to find county-specific data on the total number of preschool center slots in the county for children, and the total number of family child care slots.

Since the slots cover the age group 2-5, not specifically four-year-olds, ask the Advisory Group to help estimate the proportion of slots used by each age group. For example, in a sample that we use to present an example of how the model could be implemented, as presented below, the providers estimated that the preschool center programs served approximately the same numbers of two-, three- and four-year-olds, and they also were able to estimate the percentage of family child care slots available to four-year-olds. Once you have an estimate of the number of slots, ask the Child Care Resource and Referral Agency to assist in determining the vacancy rate.

The final step is to determine an implementation strategy. According to the IWPR/ECPR model, one viable strategy is to assume that a universally accessible preschool program would take about 10 years to implement. In addition, First 5 California Preschool for All Demonstration Grant criteria require implementing the program first in school districts which have elementary schools with low API (first three deciles) scores. These are the same schools that are eligible to apply for First 5 School Readiness grants. To determine the districts in which these schools are located, consult the California Department of Education website which contains a list of schools and their API scores. (<http://api.cde.ca.gov/api2002base/>). Additional information on the demographics of the schools (percentage of children eligible for free or reduced price lunch, percentage of English language learners) is also available for these schools. Our first suggested scenario is to phase in Preschool for All beginning in neighborhoods surrounding low API

schools in the first three years, then expand to the rest of the school district or districts in years 4 and 5, and finally extend services to the county as a whole in years 6-10. However, this is only one possible scenario, and the model can be adjusted to cover many other phase-in strategies.

As indicated in Section 3, a similar, though more in-depth method for informing the phase-in scenario is being developed in Los Angeles County in conjunction with its Master Plan for Preschool for All. Using the four weighted variables of unmet need, elementary school API scores, maternal employment and family income, displayed in a series of geo-coded maps, the planning group, led by Dr. Karen Hill-Scott, is targeting specific zip codes for priority deployment of resources. A fifth variable, the prevalence of children that are both English language learners and also not fluent in their home language, is under consideration once zip-code level data on this population is collected.

Stage 4. Put it All Together

The final phase of the model puts together the program parameters, annual take-up rate, and estimated unit costs to calculate annual estimated costs for each implementation year of Universal Preschool for All. To complete this phase, users should input the above estimates into the following formulas:

For children assigned to State Preschool program, use the following formulas:

- a. (Estimated annual number of four-year-olds served in a Public Preschool program) * (per-child-hour-unit cost for an upgraded slot) * (612.5 hours)
- b. (Estimated annual number of new four-year-olds to be served in a Public Preschool program) * (per-child-hour-unit cost for a new slot) * (612.5 hours)

For children assigned to a Head Start program, use the following formulas:

- c. (Estimated annual number of four-year-olds served in Head Start program) * (per-child-hour-unit cost for an upgraded slot) * (612.5 hours)
- d. (Estimated annual number of new four-year-olds to be served in a Head Start program) * (per-child-hour-unit cost for a new slot) * (612.5 hours)

For children assigned to a full-day, full-year early care and education program, use the following formulas:

- e. (Estimated annual number of four-year-olds served in a full-day, full-year program) * (per-child-hour-unit cost for an upgraded slot) * (612.5 hours)
- f. (Estimated annual number of new four-year-olds to be served full-day, full-year program) * (per-child-hour-unit cost for a new slot) * (612.5 hours)

Stage 5: Adjusting for Inflation

Another issue to consider is adjustment for inflation. Costs will most likely change during the years of program implementation. One way to estimate this change is to estimate inflation increases based on information from an outside economic analyses. For example, the Congressional Budget Office (CBO) will often generate reports that estimate future changes in inflation. If for example, the CBO estimated that the inflation rate would increase about 2.5 percent every year for the next ten years, annual estimates could be adjusted by 2.5 percent. The actual formulas would be the following (assuming Year 1 would not need an inflation adjustment):

Year 1= no adjustment

Year 2= (annual estimate) * (.025)

Year 3= (annual estimate) * (.025)²

Year 4= (annual estimate) * (.025)³

And so on.

An Example of a County Cost Estimate

County X is a small, densely populated region with a diverse population where almost half of the children speak languages other than English. In many ways, the county has a relatively strong supply of early care and education programs, with a well-established State Preschool program as well as Head Start, center and family child care, and an active Child Care and Development Planning Council and Child Care Resource and Referral Agency. Nevertheless, the cost of these services is one of the highest in the state, and many families who cannot afford the full price of quality preschool or other early care and education services are currently ineligible for publicly supported programs.

Estimated Need

Table 4-1: The Estimated Need for Preschool in County X*	
Total Population of Four-Year-Olds In County	9012*
Projected Number of Participating Children at Full Implementation	6464**
Projected Number of Children Who Will Need 3.5 Hours of Service, 175 Days Per Year (or 2.5 Hours of Service, 245 Days Per Year)	2586***
Projected Number of Children Who Will Need Preschool Embedded in or Linked to Full-Day, Full-Year Service ((8-11 Hours of Service, 245 Days per Year)	3878***

*Population estimate based on 2000 Census data, Summary Tape File 3.

**Participation rate estimated at 72%, including 80% in the neighborhoods surrounding low API schools and 70% in the remainder of the county.

*** Need for part-day vs. full-day (40% vs. 60%) based on current distribution of part-day and full-day settings from Resource and Referral data and estimated percentage of children birth to 5 living with two employed parents or an employed single head of household.

Estimated Direct Costs

We designed two sets of proxy budgets – **Before Preschool for All** and **After Preschool for All** for three types of programs likely to deliver preschool services – the existing State Preschool Program, the General Child Care and Development Program, and Head Start. As more information about the First 5 Preschool for All Grant criteria become available, we plan to add an additional set of budgets for family child care homes. For this exercise, however, we assume that the per-child costs for family child care would be the same as those for centers participating in Preschool for All. The following summarizes the characteristics of each potential program setting:

- **State Preschool Program:** Usually a part-day, part-year program that emphasizes preschool education and must meet Title 5 standards (See Table II-3). These include a 1:8 staff-child ratio, a maximum group size of 24, and at least one teacher per class with a minimum of 24 units of Early Childhood Education or Child Development and 16 general education units. California Department of Education (CDE) contracts with local educational agencies, colleges, community action agencies and private-non-profit agencies to provide the service. Although the pattern varies, many State Preschool Programs operate two sessions per day.
- **General Child Care and Development Program:** Typically a year-round program for up to 10 hours per day. This program must meet the same Title 5 standards as the State Preschool Program. CDE contracts with either public or private agencies or local educational agencies to deliver the services in *centers* and *family child care home networks*.
- **Licensed Child Care:** A center-based child care program that operates 11 hours per day and must meet California Child Care Licensing Requirements (Title 22). These include a 1:12 staff-child ratio. Minimum teacher qualifications are 12 units of Early Childhood Education or Child Development or a Child Development Associate certificate. “Small family child care home” generally means a home that provides child care for up to six – eight children, depending upon the age of the child and including the provider’s own children under age 10. “Large family child care home” generally means a home that provides family child care for up to 12-14 children, depending upon the age of the child



and including the provider's own children, with two adults available to provide care and supervision at all times.

- **Head Start:** Typically a part-day, part-year program with education, health, medical, dental, nutritional and mental health services. However, for purposes of the budgets below, we only include the costs associated with the educational component. It is assumed that the costs of comprehensive services would remain the same, and that any added costs associated with implementing Preschool for All in Head Start would be associated with the educational component.

The first set of budgets was constructed to represent an “average” program, with actual county data used for the specifics. State Preschool teacher salaries came from the County Office of Education and school-based State Preschool programs; Head Start teacher salaries came from Head Start Program Information Reports; and General Child Care teacher salaries came from school district coordinator of the program. We circulated these budgets to various early care and education experts in the county to obtain their input and to ensure that they were reasonable; then the costs were converted to per-child-hour units. Please note on the budget pages for our sample county in the Appendix that the actual cost of the State Preschool and General Child Care programs, even under existing standards, exceed the current state reimbursement rate.

The second set of budgets was constructed to represent the cost for each program to adhere to the Preschool for All standards. These budgets were constructed assuming increases primarily in personnel costs. Funding was added to ensure that each program had the following:

- At least one teacher with a Bachelor's degree in early childhood education or child development in every preschool classroom for at least 612.5 hours (3.5 hours for 175 days, or 2.5 hours for 245 days), with salary and benefits comparable with those of public school kindergarten teachers. In our sample county, the Head Start program already pays teachers who have the above qualifications \$37,000, or slightly more than the \$35,000 median kindergarten teacher salary for 2002-2003 plus benefits. Hence, we used the Head Start salary for teachers with Bachelor's degrees to estimate costs.
- A second teacher in each class with an Associate's degree in early education or child development for at least 612.5 hours, with a salary 80% of that of the teacher with a Bachelor's degree.
- A program director paid according to the district's average elementary school principal salary.
- For programs with at least one teacher in each class with a Bachelor's degree in early childhood education or child development, a staff-child ratio of no more than 1:10 and a class size of no more than 20, in accordance with the accreditation criteria of the National Association for the Education of Young Children and the class size recommendations of the State Master Plan for Education School Readiness Work Group. (Under the Preschool for All Demonstration grants, the current 1:8 ratio would still be required for classrooms that did not have teachers with Bachelor's degrees, including portions of the day in the full-day program in our sample county estimate.)



Generally, non-personnel costs represent no more than 25% of a non-profit child care budget (Helburn, 1995 cited in Golin and Mitchell, forthcoming), and we assume that the same principle applies to other early care and education settings. However, because of the high costs of occupancy and insurance in this particular sample Bay Area county, which has the fifth highest market rate for preschool center care in the state, we also increased the budget for non-personnel costs in State Preschool and General Child Care and Development from \$1,500 to \$2,000 in a part-day program, and from \$3,000 to \$4,000 in a full-day program. This was also done to help account for the in-kind contributions that might not be available to all programs were Preschool for All implemented on a large scale.

Table 4-2 below summarizes the direct unit costs of upgrading the existing State Preschool, General Child Care and Development Program, and Head Start (education component only) to meet Preschool for All standards; more detail on the “before” and “after” budgets for each program is available in Appendices 4-1 through 4-3. Once existing slots in the programs have been upgraded to meet the new standards, we assume that new slots in all programs will be purchased at the new State Preschool rate.

Table 4-2: Estimating Direct Unit Cost of Providing Preschool in County X*

Program	Preschool for All Costs: The Cost of Operation plus improvements for 612.5 hours (per-child-hour)	Current Annual Allocation for 612.5 hours (per-child-hour)	Difference in Costs (per-child-hours)
State Preschool	\$4,761 (\$7.77)	\$3,143 (\$5.13)	\$1,618 (\$2.64)
General Child Care and Development Program (Title 5) ²	\$4,911 (\$8.02)	\$1,567 (\$2.56)	\$3,344 (\$5.46)
Head Start	\$5,375 (\$8.78)	\$4,806 (\$7.85)	\$ 569 (\$.93)

* Note: Total cost estimates may be affected by the rounding of per-child-hour costs.

Implementation Time Frame: Estimated Cost of Preschool for All in County X

The Implementation Time Frame below provides one possible scenario for phasing in Preschool for All in the sample county. Essentially, the implementation would begin with upgrading existing early care and education programs, replacing parent fees for the preschool hours, and establishing new preschool spaces in the neighborhoods of 8 low API schools in one district, and then spread out to the remaining schools in the district. Then the program would be implemented in neighborhoods surrounding three low API schools in a second school district.

² In order to determine the weighted cost of providing Preschool services in a Title 5 child care program for 2.5 hours, multiply the Preschool portion of the day (2.5 hours) and the proportion of “After Preschool Upgrade” cost per child year to the current annual reimbursement rate (in our example, $\$12,205/\$6,894 = 1.77$). The product (4.43) is the adjusted, weighted portion of the day used to calculate the cost of providing 2.5 hours of Preschool services. In our example, to determine the cost per child Preschool day after the Preschool upgrade:

Preschool cost per child year/Number of days in a full year * Weighted Preschool portion of the day
 $\$12,205/245 * (2.5/11) * (\$12,205/\$6,894) = \20.04 .

To determine the cost per child Preschool hour after the Preschool upgrade:

Preschool cost per child Preschool day/Number of Preschool hours
 $\$20.04/2.5 \text{ hours} = \$8.02 \text{ per Preschool hour}$

Within 10 years, Preschool for All would be implemented countywide. A description of the year-by-year roll-out of the program is included below.

Table 4-3 summarizes the costs of new and upgraded slots. As indicated in the year-by-year tables, upgrading would take place in a variety of settings, including existing State Preschool programs, Head Start, Child Care and Development Programs, other center-based programs, and family child care. Because all new slots are assumed to have the same cost, we did not attempt to estimate the distribution of new slots in this exercise.

First 5 Preschool for All grant criteria currently limit family child care participation to family child care networks. However, recognizing that there is currently only one family child care network in our sample county, and that the county planning group expressed interest in participation by large family child care homes, we used large family child care homes as a substitute for family child care networks. For purposes of estimating the number of homes eligible for upgrading under Preschool for All, therefore, we obtained data from the Child Care Resource and Referral agency on the number of 4-year-olds being served in large family child care homes. Based on a workforce study conducted in the county, we then factored in the percentage of large family child care homes with at least one provider with a Bachelor's degree.

Year One Estimate

Because our sample county already has spent considerable time planning for a universal preschool program, only year one is reserved for planning. This will include assessment of the status of facilities and workforce development in a county with 8 low API schools in one school district, and 6 in another district, and 1 more in a third district. For counties in which Preschool for All is a more recent interest, a longer planning period may be needed.

Years Twos - Three

In the first two years of operation, Preschool for All will begin with one school district that has 8 low API schools, serving all of the projected need (80% of the four-year-olds) in those school neighborhoods. In addition, the program will begin to phase in Preschool for All in the remaining neighborhoods in the district. During this two-year time period, 161 new preschool spaces will be funded, primarily in the vicinity of two neighborhoods determined to have neither a state preschool program nor convenient access to Head Start nor community-based child care. In addition, 436 spaces will be upgraded. In addition, fees for the preschool portion of the day will be replaced for families currently paying fees.

Years Four - Five

In the second two years of operation, Preschool for All will be implemented in a second school district with 6 low API schools. In addition, the program will roll out to the two remaining school neighborhoods in this second school district that are not low API schools. By Year 5, 80% of 4-year-olds in both school districts with low API schools will be served.

Years Six - Ten

The Preschool for All Program will roll out to the remainder of the county, serving an estimated 72% of four-year-olds. This includes 80% of the four-year-olds in the low API neighborhoods, and 70% of the four-year-olds in the rest of the county.

Table 4-3

Year	# Children Served in Preschool for All	# New Preschool Slots Established	Estimated Cost	# Slots Upgraded	Estimated Cost	# Slots Upgraded with Fees Replaced	Estimated Cost	Total Cost
Year 2	403	81	\$383,246	159	\$275,010	164	\$804,643	\$1,462,899
Year 3	598	161	\$766,491	217	\$376,116	220	\$1,082,112	\$2,224,719
Year 4	1060	356	\$1,695,132	349	\$609,030	355	\$1,742,213	\$4,046,375
Year 5	1243	471	\$2,240,528	383	\$670,430	389	\$1,910,717	\$4,821,676
Year 6	3267	885	\$4,210,757	942	\$1,659,893	1440	\$7,074,796	\$12,945,446
Year 7	4067	1299	\$6,180,986	1076	\$1,912,192	1691	\$8,309,184	\$16,402,362
Year 8	4866	1713	\$8,151,215	1210	\$2,164,491	1943	\$9,543,572	\$19,859,278
Year 9	5665	2127	\$10,121,444	1344	\$2,416,790	2194	\$10,777,960	\$23,316,194
Year 10	6464	2541	\$12,091,673	1479	\$2,669,089	2445	\$12,012,348	\$26,773,110

Table 4-4

Year	Total Cost after Inflation Adjustment
Year 2	\$1,499,472
Year 3	\$2,337,345
Year 4	\$4,357,503
Year 5	\$5,322,228
Year 6	\$14,646,584
Year 7	\$19,021,711
Year 8	\$23,606,441
Year 9	\$28,408,519
Year 10	\$33,435,946

Year 2 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	108	\$2.64	3.5	175	\$173,828
Head Start	25	\$0.93	3.5	175	\$14,467
Child care center:					
• Upgrading General Child Care/CDD (title 5)	26	\$5.46	2.5	245	\$86,716
• Upgrading existing slots and replacing parents fees in other center-based programs	152	\$8.02	2.5	245	\$745,696
Family Child Care – upgrading and replacing parent fees	12	\$8.02	2.5	245	\$58,947
New slots	81	\$7.77	3.5	175	\$383,246
Total	403				\$1,462,899
Total Cost After Adjusting for Inflation					\$1,499,472

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 3 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	148	\$2.64	3.5	175	\$238,508
Head Start	33	\$0.93	3.5	175	\$18,626
Child care center:					
• Upgrading General Child Care/CDD (title 5)	36	\$5.46	2.5	245	\$118,983
• Upgrading existing slots and replacing parents fees in other center-based programs	208	\$8.02	2.5	245	\$1,023,165
Family Child Care – upgrading and replacing parent fees	12	\$8.02	2.5	245	\$58,947
New slots	161	\$7.77	3.5	175	\$766,491
Total	598				\$2,224,719
Total Cost After Adjusting for Inflation					\$2,337,345

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 4 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	239	\$2.64	3.5	175	\$386,657
Head Start	52	\$0.93	3.5	175	\$29,484
Child care center:					
• Upgrading General Child Care/CDD (title 5)	58	\$5.46	2.5	245	\$192,889
• Upgrading existing slots and replacing parents fees in other center-based programs	338	\$8.02	2.5	245	\$1,658,705
Family Child Care – upgrading and replacing parent fees	17	\$8.02	2.5	245	\$83,508
New slots	356	\$7.77	3.5	175	\$1,695,132
Total	1060				\$4,046,375
Total Cost After Adjusting for Inflation					\$4,357,503

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 5 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	263	\$2.64	3.5	175	\$425,936
Head Start	56	\$0.93	3.5	175	\$32,010
Child care center:					
• Upgrading General Child Care/CDD (title 5)	64	\$5.46	2.5	245	\$212,484
• Upgrading existing slots and replacing parents fees in other center-based programs	372	\$8.02	2.5	245	\$1,827,209
Family Child Care – upgrading and replacing parent fees	17	\$8.02	2.5	245	\$83,508
New slots	471	\$7.77	3.5	175	\$2,240,528
Total	1,243				\$4,821,676
Total Cost After Adjusting for Inflation					\$5,322,228

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 6 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	470	\$2.64	3.5	175	\$760,798
Head Start	245	\$0.93	3.5	175	\$139,343
Child care center:					
• Upgrading General Child Care/CDD (title 5)	227	\$5.46	2.5	245	\$759,752
• Upgrading existing slots and replacing parents fees in other center-based programs	1,330	\$8.02	2.5	245	\$6,533,314
Family Child Care – upgrading and replacing parent fees	110	\$8.02	2.5	245	\$541,482
New slots	885	\$7.77	3.5		\$4,210,757
Total	3,267				\$12,945,446
Total Cost After Adjusting for Inflation					\$14,646,584

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 7 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	525	\$2.64	3.5	175	\$848,631
Head Start	281	\$0.93	3.5	175	\$160,264
Child care center:					
• Upgrading General Child Care/CDD (title 5)	270	\$5.46	2.5	245	\$903,298
• Upgrading existing slots and replacing parents fees in other center-based programs	1,581	\$8.02	2.5	245	\$7,767,702
Family Child Care – upgrading and replacing parent fees	110	\$8.02	2.5	245	\$541,482
New slots	1,299	\$7.77	3.5	175	\$6,180,986
Total	4067				\$16,402,362
Total Cost After Adjusting for Inflation					\$19,021,711

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 8 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	579	\$2.64	3.5	175	\$936,463
Head Start	318	\$0.93	3.5	175	\$181,184
Child care center:					
• Upgrading General Child Care/CDD (title 5)	313	\$5.46	2.5	245	\$1,046,844
• Upgrading existing slots and replacing parents fees in other center-based programs	1833	\$8.02	2.5	245	\$9,002,090
Family Child Care – upgrading and replacing parent fees	110	\$8.02	2.5	245	\$541,482
New slots	1713	\$7.77	3.5	175	\$8,151,215
Total	4866				\$19,859,278
Total Cost After Adjusting for Inflation					\$23,606,441

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 9 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	633	\$2.64	3.5	175	\$1,024,296
Head Start	355	\$0.93	3.5	175	\$202,105
Child care center:					
• Upgrading General Child Care/CDD (title 5)	356	\$5.46	2.5	245	\$1,190,389
• Upgrading existing slots and replacing parents fees in other center-based programs	2,084	\$8.02	2.5	245	\$10,236,478
Family Child Care – upgrading and replacing parent fees	110	\$8.02	2.5	245	\$541,482
New slots	2,127	\$7.77	3.5	175	\$10,121,444
Total	5,665				\$23,316,194
Total Cost After Adjusting for Inflation					\$28,408,519

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Year 10 Estimates

	Number of Children	Unit cost (per hour)	Number of Hours	Number of Days	Total Cost*
Upgrade of existing slots:					
State Preschool	688	\$2.64	3.5	175	\$1,112,128
Head Start	392	\$0.93	3.5	175	\$223,026
Child care center:					
• Upgrading General Child Care/CDD (title 5)	399	\$5.46	2.5	245	\$1,333,935
• Upgrading existing slots and replacing parents fees in other center-based programs	2,335	\$8.02	2.5	245	\$11,470,866
Family Child Care – upgrading and replacing parent fees	110	\$8.02	2.5	245	\$541,482
New slots	2,541	\$7.77	3.5	175	\$12,091,673
Total	6,464				\$26,733,110
Total Cost After Adjusting for Inflation					\$33,435,946

*The total cost may be affected by rounding of the number of children and/or inflation adjustment.

Section 4 Appendix

Appendix 4-1: Estimated Cost of Upgrading One State Preschool Program to Include Preschool for All

		Before PS upgrade	After upgrade
Number of days per year		175	175
Number of sessions		2	2
Number of PS hours		3.5	3.5
Number of PS hrs / year		612.5	612.5
Number of children (total)		96	120
Number of classes		4	6
Number of instructional staff		6	6
Class size		24	20
Adult to child ratio (1: XX)		8	10
Cost per hour		\$5.13	\$7.77
Cost per day		\$17.96	\$27.20
Annual cost		\$3,143	\$4,761

Budget Item		Annual Expense as State Preschool	Annual Expense as Preschool for All
FTE	Salaries		FTE
	Director (.15 FTE)	\$15,161	\$18,951
1	Site Supervisor (one of the master's teachers)	\$36,179	\$44,400
1	Master Teacher	\$30,149	\$74,000
0	Teacher		\$59,200
0	Floater		\$29,600
4	Teacher Aide	\$80,000	\$0
	Accounting/bookkeeping	\$1,183	\$1,232
	Education Specialist	\$6,662	\$6,940
	Enrollment specialist	\$6,223	\$6,483
	Substitutes (\$20 per hour)	\$14,400	\$12,000
Subtotal		\$189,956	\$258,136
Mandatory Benefits			
	FICA (6.2%)	\$10,884	\$15,112
	Medicare (1.45%)	\$2,546	\$3,534
	Unemployment (3.4%)	\$5,969	\$8,287
	Workers' Compensation (4.6%)	\$8,076	\$11,212
	State Employment Training Tax (\$7/employee)	\$42	\$42
Subtotal (15.65 percent)		\$27,517	\$38,187
Other Benefits			
	Health, Dental, Retirement, Life, EAP	\$25,192	\$34,976
Subtotal (14.35 percent)		\$25,192	\$34,976
Non-personnel (per child)			
		\$1,500	\$2,000
Subtotal		\$144,000	\$240,000
Total		\$386,675	\$571,299
Cost per child year		\$4,028	\$4,761
Current reimbursement rate		\$3,143	
Diff bet current cost and reimbursement*		\$885	
Current cash reimb diff + new PS cost			\$1,618
Cost per child day		\$17.96	\$27.20
Cost per hour		\$5.13	\$7.77
Cost difference per-child-year between State Preschool and Preschool for All			\$1,618
Cost difference per-child-hour based on 612.5 hours of Preschool for All per year			\$2.64
Budget Assumptions			
Program and Staffing Characteristics			
Before upgrade			
Budgets are based on a State Preschool program open from 8:30am-4:30 pm (eight hours), running two 3.5 hour sessions per day. Staff work eight hours per day, 175 days per year, and have 15 days of leave, unless otherwise noted. The State Preschool program has 2 classrooms that serve 24 children per session--thus 96 children are served per day per classroom, for a total of 96 children per program.			
After upgrade			
There will be 175 days per year, 3.5 hrs per day and 20 children in the classroom per session, and a 1:10 staff-child ratio with a "floater" serving all 6 classes. An additional classroom will be created, and a total of 120 children served. Salary for master teacher is equivalent to that of kindergarten teacher. Site supervisor receives 20% bonus.			
*Note: the actual expense is 30% higher than the state reimbursement, reflecting in-kind expenses.			
Source: School district preschool coordinator			



Appendix Table 4-2: Estimated Cost of Upgrading One Head Start Program to Include Preschool for All

		Before PS Upgrade		After PS Upgrade	
Number days / year		175		175	
Number sessions		2		2	
Number of Head Start hours		3.5		3.5	
Number children (total)		80		80	
Number classes		4		4	
Number classrooms		2		2	
Number of instructional staff		6		5	
Class size		20		20	
Cost per hour		\$7.85		\$8.78	
Cost per day		\$27.46		\$30.72	
Annual cost to include Preschool for All		\$4,806		\$5,375	
Budget Item		Annual Expense as Head Start		Annual Expense as Head Start/ Preschool for All	
Salaries					
	Administrative Director (.11 FTE)	\$8,212	0.11	\$8,212	
2	Teacher-Director	\$73,000	2	\$85,357	
	Child Development/Education Coordinator (.11 FTE)	\$7,088	0.11	\$7,088	
2	Teachers	\$67,062	2	\$74,811	
2	Assistant Teachers	\$33,504	1	\$17,560	
	Substitutes (\$20 per hour)	\$14,400		\$14,400	
Subtotal		\$203,266		\$207,428	
Mandatory Benefits					
	FICA (6.2%)	\$11,710		\$11,968	
	Medicare (1.45%)	\$2,739		\$2,799	
	Unemployment (3.4%)	\$6,421		\$6,563	
	Workers' Compensation (7.0%)	\$13,221		\$13,512	
	State Employment Training Tax (\$7/employee)	\$44		\$44	
Subtotal (18.05 percent)		\$34,134		\$34,885	
Other Benefits					
	Health, Dental, Retirement, Life, EAP	\$27,102		\$27,700	
Subtotal (14.35 percent)		\$27,102		\$27,700	
Non-personnel (per child)					
	\$1,500	\$120,000	\$2,000	\$160,000	
Subtotal		\$120,000		\$160,000	
Total		\$384,502		\$430,013	
Cost per child year		\$4,806		\$5,375	
Cost per child day		\$27.46		\$30.72	
Cost per hour		\$7.85		\$8.78	
Cost difference per-child-year between Head Start and Preschool for All				\$569	
Cost difference per-child-hour based on 612.5 hours of Preschool for All per year				\$0.93	

Budget Assumptions and Source Information**Program and Staffing Characteristics (Before Upgrade)**

Budget is based on the educational component only (not including comprehensive services) of a typical Head Start program open from 8:30am-4:30 pm (eight hours), running two 3.5 hour sessions per day. Staff work eight hours per day, 175 days per year, and have 15 days of leave, unless otherwise noted. The Head Start program has two classrooms that serve 20 children per session--thus 40 children are served per day per classroom, for a total of 80 children per program. There is one teacher-director, one teacher and one assistant teacher per classroom. Fifty-five percent of teachers have BA degrees, and 7 percent have Master's degrees. Teacher-directors, teachers and assistant teachers work 8:30am-4:30pm, eight hours per day. There are two administrative directors working 100 percent time at the home office, which oversees all of the programs in the county. There are also two CD and Education Coordinators who work at the home office and play lead administrative roles. Costs include only the educational component of Head Start and have been adjusted for inflation using the Consumer Price Index (2003). In addition, a Cost of Living Adjustment (COLA) of 2.5 percent was provided to instructional staff who did not receive a salary upgrade through Preschool for All.

Program and Staffing Characteristics (After Upgrade)

Program and staffing characteristics are the same with the following exceptions: teachers' compensation is increased, 1 FTE Assistant Teacher is removed, and increased occupancy costs are funded.

Source: Interviews with county-level Head Start agency staff and *Head Start Program Information Report, Program Year 2001-02*.



Appendix 4-3: Estimated Cost of upgrading One Child Care Program (Title 5) to Include Preschool for All

	Before PS Upgrade	After PS Upgrade
Number of days in a full year	245	245
Number of sessions	1	1
Number of PS hours	0	2.5
Number of PS hours / year	0	612.5
Number of children (total)	96	100
Number of child care center hrs (opening hr)	11	11
Number of classes	4	5
Number of instructional staff	14	13.5
Class size	24	20
Adult to child ratio (1:XX)*	8	10
Cost per preschool hour	\$2.56	\$8.02
Annual cost (preschool component plus child care)	\$6,894	\$12,205

Budget Item	Annual Expense as Child Care	Annual Expense to Include Preschool for All
Salaries		
Director (.25 FTE)	\$26,784	\$27,900
1 Site Supervisor (one of the master teachers)	\$56,373	\$65,966
Add'l lead or master Teacher	\$0	\$109,943
4 Teachers	\$199,079	\$131,931
9 Teacher aides	\$260,000	\$177,667
Floater		1.5 \$65,966
Education specialist	\$11,770	\$12,260
Enrollment specialist	\$10,994	\$11,452
Accounting /bookkeeping	\$2,090	\$2,177
Substitutes (\$20 per hour)	\$33,600	\$32,400
Subtotal	\$600,689	\$637,661
Mandatory Benefits		
FICA (6.2%)	\$35,160	\$37,526
Medicare (1.45%)	\$8,223	\$8,776
Unemployment (3.4%)	\$19,281	\$20,579
Workers' Compensation (4.6%)	\$26,086	\$29,053
State Employment Training Tax (\$7/employee)	\$98	\$95
Subtotal (15.65 percent)	\$88,847	\$96,028
Other Benefits		
Health, Dental, Retirement, Life, EAP	\$81,377	\$86,855
Subtotal (14.35 percent)	\$81,377	\$86,855
Non-personnel (per child)	\$3,000	\$4,000
Subtotal	\$288,000	\$400,000
Total	\$1,058,914	\$1,220,544
Cost per child year	\$11,030	\$12,205
Daily cost to agency	\$45.02	\$49.82
Current reimbursement rate	\$6,894	
Diff bet current cost and reimbursement*	\$4,136	
Current cash reimb diff + new PS cost		\$5,311
Current daily reimbursement rate	\$28.14	
(Weighted) Cost per child PS day (2.5 hours)***	\$6.40	\$20.04
(Weighted) Cost per child PS hour	\$2.56	\$8.02
Cost difference per-child-year between child care and Preschool for All for 612.5 hours only		\$3,344
Cost difference per-child-hour based on 612.5 hours of Preschool for All per year		\$5.46

Budget Assumptions and Source Information

Program and Staffing Characteristics (before upgrade)

Budgets are based on a General Child Care and Development program that opens from 7 am-6 pm (11hr) and serves 96 preschool children (a ratio of 1:8). Staff work eight hours per day, year round, and have 15 days of leave. Instructional staff (e.g., teacher aides) work shifts to cover morning and afternoon pick ups.

Program and Staffing Characteristics (after upgrade)

The program will operate 245 days, provide 2.5 hours of preschool daily, and serve 100 children, with a teacher to student ratio of 1:10. Teacher salaries upgraded to be equivalent to kindergarten teacher salaries, and non-personnel increased to reflect real occupancy costs. A COLA of 2.5% was provided to instructional staff who did not receive a salary upgrade through Preschool for All.

*The staff-child ratio of 1:10 only applies to Preschool, where there is a teacher with a BA degree. During other hours, three adults would still be needed, except during naptime. See Appendix 4-4 on the next page or the staffing pattern that accompanies this estimate.

**The actual expense is over 50% more than the state reimbursement, reflecting in-kind expenses.

***See page 102 for a detailed explanation of the weight calculation.

Appendix 4-4: Staffing Pattern for Upgraded Child Care Program (Title 5) to Include Preschool for All

Hours	Number of Children	Preschool Classroom 1 Staff	Preschool Classroom 2 Staff	Preschool Classroom 3 Staff	Childcare Room 1 Staff	Childcare Room 2 Staff	Total Staff
		Class 1A & 1B (morning & afternoon class, 20 children each)	Class 2 A & 2B (morning & afternoon class, 20 children each)	Class 3A (morning preschool, 20 children – children stay in same room in afternoon – could save money by having part-time MT, and additional T)	Class 1B & 1A (child care) plus opening & closing	Class 2B & 2A (child care) plus opening & closing	
7:00 a.m. to 9:00 a.m.	40				T1 TA4	T2 TA5 Floater A	4 plus Floater A**
9:00 a.m. to 11:30 a.m.	100	MT1 TA1	MT2 TA2	MT3 TA3	T1 TA4	T2 TA5 Floater A or volunteer	10 plus Floater A
11:30 a.m. to 2:00 p.m.	100 (lunch, breaks, planning, nap)	MT1 TA1	MT2 TA2	MT3 TA3	T1 TA4	T2 TA5 Floater A	10 plus Floater A
2:00 p.m. to 4:30 p.m.	100	MT1 TA1	MT2 TA2	MT3 TA3	T3 TA6	T4 TA7 Floater B or volunteer	10 plus Floater B
4:30 p.m. to 6:00 p.m.	40				T3 TA6	T4 TA7 Floater B	4 plus Floater B

Total Staff: 13.5 Full-time equivalents (FTEs)

3 Master Teachers (MT), BA level, all full time

4 Teachers (T), AA level, 3 FTEs only: T1 & T2 full time, T3 & T4 (.5 FTE each)

6 Teacher Assistants (TA): TA1, TA2, TA3, TA4, TA5 are full time, TA6 & TA7 (.5 FTE each) from 2:00 p.m. to 6:00 p.m.

**1.5 floaters: Floater A (1 FTE) and Floater B (.5 FTE) provide 10+ hrs of floater support to provide the third adult in child care classroom when there is no volunteer available, and to relieve other staff in other classrooms when possible. 1 FTE may be 2 half-time persons.

Children move between preschool and child care classrooms:

A group of 20 (class 1A) stays in preschool classroom 1 from 9:00-11:30 to receive preschool instruction, stays through lunch until 2:00, then moves into one of the child care rooms (e.g., room 1) from 2:00 until close of center. A second group of 20 stays in a child care room (child care room 1) until lunch, then moves into preschool classroom 1 from 2:00-4:30, then returns to the child care room until dismissal.

Only the children in preschool classroom 3 stay all day in the same room. This estimate assumes that the MT3 and TA 3 would work fulltime with the same group; some savings could be realized if the MT3 worked part-time, and was followed by a another part-time Teacher and Teacher aide. These savings could then be invested in another teacher or teacher aide for the child care classrooms.

For purposes of this exercise, one child care classroom is assumed to have 24 children (and therefore to need a third adult), and one 16 (and therefore not to need a third adult). This is necessary in order to be in compliance with Title 5 requirements. In the next version of the cost estimate exercise, we plan to reduce the Master Teacher 3's hours to part-time, and to invest the savings in another teacher aide so that both child care classrooms can have the class size of 20 and have 3 adults.

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